REMARKS

Claims 1 and 11 are objected to because they contain the trademark/trade name PCI Express. Examiner respectfully asserts the applicant to remove the trademark/trade name from the claim language and replace with appropriate generic terminology. Appropriate correction is required.

Claims 1 and 11 have been amended to remove all references to the trademark "PCI Express", as suggested by the Examiner. No new matter is entered. Consideration of claims 1 and 11 is respectfully requested.

Claims 1-12 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-8, 14-16, 18 and 20 of copending application No. 10/640439 (hereinafter referred to as '439).

Applicant has amended the claims of both the present invention and of copending application No. 10/640439 to make clear the material being patented and to prevent the above obviousness-type double patenting rejection. In particular, in the present invention, claims 1, and 11 are amended to include the terms "Packet Triggered Power Management (PTPM)" and "traditional level triggered". Support for these amendments is located in paragraph [0012] stating, "... is similar to the PME (power Management Event) interrupt defined by the PCI specification". In other words, a traditional level triggered power mechanism. Additionally, in copending application No. 10/640439, the term "beacon signal" is amended to "auxiliary-powered wakeup signal" to distinguish the two inventions. That is, the copending invention is directed at an auxiliary-powered signal trigger, while the present application is directed at a level triggered packet trigger. Therefore, the two inventions as claimed utilize different steps and should therefore not be found rejected as double patenting. Withdrawal of the nonstatutory obviousness-type double patenting is accordingly requested.

Claims 1, 2, 5, 9 and 10 are rejected under 35 USC 103a as being unpatentable over Saunders et al. (US Patent No. 6,654,896 B1) hereinafter referred to as Saunders) in view of Mowery et al. (US Patent No. 6,898,766 B2) (hereinafter referred to as Mowery) and Naveh et al. (US Patent Publication No. 2004/0210778) (hereinafter referred to as Naveh).

Applicant asserts that claim 1 should not be found unpatentable over Saunders, Mowery, and Naveh for at least the reason that none of said cited references teach the following step as is claimed in claim 1 of the present invention:

> "de-asserting the Pseudo-PME signal so that the voltage of the Pseudo-PME signal changes from the second level to the first level, the de-assertion of the Pseudo-PME signal following the assertion of the Pseudo-PME signal by a predetermined time interval;" (emphasis added)

The Examiner stated in the Office Action dated 03/06/2006 that the limitation that "the de-assertion of the Pseudo-PME signal following the assertion of the Pseudo-PME signal by a predetermined time interval" is taught by Saunders in col 4, lines 4-8. However, applicant points out that Saunders in col 4, lines 4-8 is simply teaching detecting of a non-compliance wake-up signal. Specifically, Saunders states, "The non-compliance may be determined by: (a) detecting a transition of the computer to a reduced power state; (b) pausing for a predetermined delay; and (c) sampling the wake-up signal to identify any asserted wake-up signals." (col 4, lines 7-11)

Waiting a predetermined delay between transition of the compute to a reduced power state and then sampling the wake-up signal as taught by Saunders is clearly not equivalent to "the de-assertion of the Pseudo-PME signal following the assertion of the Pseudo-PME signal by a predetermined time interval" as is claimed by the present invention in claim 1. Further, applicant points out that Saunders teaches in col 6, lines 40-45, "Thus, if a device is driving the wake-up signal in a non-compliant fashion, the wake-up signal will become or remain low (the PME# signal is asserted when low) no later than some predetermined delay T after the

Power Good signal becomes de-asserted." (emphasis added) That is, Saunders is simply making an observation that the wake-up signal will become or remain low at least after some predetermined delay T. In this way, Saunders can determine if there is a non-compliant driving of the wake-up signal. There is no teaching by Saunders that the de-assertion of the Pseudo-PME signal must follow the assertion of the Pseudo-PME signal by a predetermined time interval, as is claimed in the present invention (claim 1). In fact, Saunders does not even teach actively asserting the Pseudo-PME signal at all as the initial state of the wake-up signal according to Saunders is continuously grounded no matter what. See col 3, lines 45-47 stating, "Although the correct way to treat a reserved pin is to leave it as a no-connection (NC) pin, many manufacturers have grounded the reserved pins as a matter of course. With the revision to the specification, the PCI devices made by such manufacturers cause the PME# signal to be constantly asserted." That is, the design of Saunders does not teach or suggest in anyway that "the de-assertion of the Pseudo-PME signal following the assertion of the Pseudo-PME signal by a predetermined time interval" (claim 1 of the present invention) also for the reason that Saunders does not teach asserting the Pseudo-PME signal.

Applicant also asserts that claim 1 should not be found unpatentable over Saunders, Mowery, and Naveh for at least the reason that there is no motivation to combine said cited references to result in the present invention as claimed in claim 1.

The Examiner stated that the limitation of conversion of a "a plurality of PM_PME packets generated by the PCI Root Complex" is accomplished because "it would have been obvious to one of ordinary skill of the art, having the teachings of Saunders, Mowery and Naveh before him at the time the invention was made, to modify PCI Express Root Complex (receiving devices) disclosed by Saunders to use the switch as taught be Naveh." (see rejection of claim 1 in the Office Action dated 03/06/2006)

However, applicant points out that the teachings of Saunders as a whole are directed at "handling of multiple compliant and non-compliant wake-up sources in a computer system" (see title), while the teachings of Naveh as a whole are directed at "system and method of

message-based power management" (see title). That is, the non-compliant wake-up signal of Saunders is interpreted by the Examiner as a PM_PME packet, but the PME signals of Naveh are interpreted by the Examiner as the plurality of PM_PME packets. Because these two interpretations are not equivalent or similar, applicant asserts there is no apparent benefit of combining the teachings of Naveh with the teachings of Saunders. The Examiner stated the motivation is to "give the added benefit of having the ability to perform a network scan to locate the originating devices of signals initiated", however, applicant points out that there are no non-compliant wake-up signals taught in Naveh and therefore there is no reason to include the switch of Naveh in the design of Saunders. Specifically, Saunders is trying to detect non-compliant wake-up signals that are driven low due to non-compliance with the PCI standard. The two inventions (i.e., of Naveh and Saunders) when viewed as individual whole units do not suggest any benefit of combination and in fact appear to suggest against combining as they are both directed at different problems.

For at least these reasons, applicant asserts that there is no motivation to combine said cited references to result in the present invention. Additionally, even after combining the teachings of Saunders, Mowery, and Naveh that the result will also not be equivalent to the present invention as claim in claim 1 of the present invention as none of said cited references teach "the de-assertion of the Pseudo-PME signal following the assertion of the Pseudo-PME signal by a predetermined time interval". Because claims 2-10 are dependent on claim 1, if claim 1 is found allowable, so too should dependent claims 2-10. Reconsideration of claims 1-10 is respectively requested.

Claims 3 and 4 are rejected under 35 USC 103a as being unpatentable over Saunders et al. (US Patent No. 6,654,896 B1) (hereinafter referred to as Suanders), Mowery et al. (US Patent No. 6,898,766 B2) (hereinafter referred to as Mowery) and Naveh et al. (US Patent Publication No. 2004/0210778) (hereinafter referred to Naveh) as applied to claim 1 above, and further in view of Bays et a. (US Patent No. 6,282,666 B1) (hereinafter referred to as Bays)

As mentioned above in the response to the rejection of claim 1, applicant points out that claims 3 and 4 are dependent on claim 1, which is believed to be allowable by the applicant. Applicant therefore asserts that claims 3 and 4 should too be found allowable for at least the same reasons as previously stated for claim 1. Reconsideration of claims 3 and 4 is respectfully requested.

Claims 6-8 are rejected under 35 USC 103a as being unpatentable over Saunders et al. US Patnent No. 6,654,896 B1) (hereinafter referred to as Saunders), Mowery et al. (US Patent No. 6,898,766 B2) (hereinafter refrred to as Mowery) and Naveh et al. (US Patent Publication No. 2004/0210778) (hereinafter referred to Naveh) as applied to claim 1 above, and further in view of Gulick (US Patent No. 5,974,492) (hereinafter referred to as Gulick)

As mentioned above in the response to the rejection of claim 1, applicant points out that claims 6 and 8 are dependent on claim 1, which is believed to be allowable by the applicant. Applicant therefore asserts that claims 6 and 8 should too be found allowable for at least the same reasons as previously stated for claim 1. Reconsideration of claims 6 and 8 is respectfully requested.

Claims 11 and 12 are rejected under 35 USC 103a as being unpatentable over Saunders et al. US Patnent No. 6,654,896 B1) (hereinafter referred to as Saunders) in view of Bays et a. (US Patent No. 6,282,666 B1) (hereinafter referred to as Bays), Mowery et al. (US Patent No. 6,898,766 B2) (hereinafter referred to as Mowery) and Naveh et al. (US Patent Publication No. 2004/0210778) (hereinafter referred to Naveh)

Applicant asserts that claim 11 should not be found unpatentable over Saunders, Bays, Mowery, and Naveh for at least the reason that there is no motivation to combine said cited references to result in the present invention as claimed in claim 11.

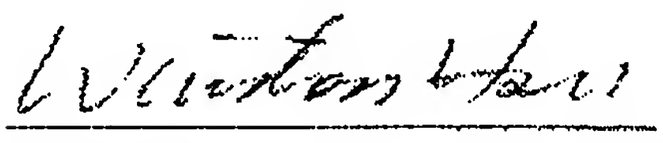
Firstly, applicant notes that the Examiner did not state how the limitation "plurality of PM_PME packets into a Pseudo-PME signal" is achieved by the combination of the cited

references. Although not specifically stated by the Examiner in the rejection of claim 11, applicant assumes that the limitation of conversion of a "plurality of PM_PME packets into a Pseudo-PME signal" is assumed to be accomplished by the Examiner similar to that stated by the Examiner in the rejection of claim 1. Namely, that "it would have been obvious to one of ordinary skill of the art, having the teachings of Saunders, Mowery and Naveh before him at the time the invention was made, to modify PCI Express Root Complex (receiving devices) disclosed by Saunders to use the switch as taught be Naveh." (see rejection of claim 1 in the Office Action dated 03/06/2006)

However, similar to above, applicant points out that the teachings of Saunders as a whole are directed at "handling of multiple compliant and non-compliant wake-up sources in a computer system" (see title), while the teachings of Naveh as a whole are directed at "system and method of message-based power management" (see title). That is, the non-compliant wake-up signal of Saunders is interpreted by the Examiner as a PM_PME packet, but the PME signals of Naveh are interpreted by the Examiner as the plurality of PM_PME packets. Because these two interpretations are not equivalent or similar, applicant asserts there is no apparent benefit of combining the teachings of Naveh with the teachings of Saunders. The Examiner stated the motivation is to "give the added benefit of having the ability to perform a network scan to locate the originating devices of signals initiated", however, applicant points out that there are no non-compliant wake-up signals taught in Naveh and therefore there is no reason to include the switch of Naveh in the design of Saunders. Specifically, Saunders is trying to detect non-compliant wake-up signals that are driven low due to non-compliance with the PCI standard. The two inventions (i.e., of Naveh and Saunders) when viewed as individual whole units do not suggest any benefit of combination and in fact appear to suggest against combining as they are both directed at different problems. Firstly, Saunders dealing with non-compliant wake-up signals, and, secondly, Naveh dealing with power management event (PME) messages. For at least this reason, applicant asserts that claim 11 should not be found unpatentable in view of the teachings of Saunders, Bays, Mowery, and Naveh. Specifically, there is no motivation to

combine said cited references to result in the present invention. As claim 12 is dependent on claim 11, if claim 12 is found allowable, so too should dependent claim 12. Reconsideration of claims 11 and 12 is respectfully requested.

Sincerely yours,



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